

Amended Claims

[Received by International Bureau on October 17, 2005: Claim 18 in the initial application has been amended; other claims have not been amended. (1 page)]

according to claim 15,  
wherein when the third radio communication device receives beacon period discard notifications whose device IDs are the same, it gives precedence to the notification whose lifetime of the beacon period discard notification is larger, and when it receives beacon period discard notifications whose device IDs are different, it gives precedence to the beacon period discard notification having either the maximum device ID or the minimum device ID among the device IDs, which were previously prescribed in its network.

17. The radio communication method according to claim 16,  
wherein the third radio communication device gives precedence to the notification whose lifetime is larger when the device ID of a transmission destination of the received notification is the same.

18. (After amendment) The radio communication device,  
comprising:

a beacon reception unit receiving a beacon and extracting a frame;

a frame judgment unit judging whether the extracted frame is one giving notice of a collision with a beacon of another network;

a frame constructing unit used when said frame judgment

unit has judged that the frame is a collision notification, generating a collision notification frame for relaying the collision notification; and

a beacon transmission instruction unit instructing transmission of the collision notification frame at the beacon transmission timing.

19. The radio communication device according to claim 18, wherein the collision notification frame includes information which prescribes a new time slot excluding a beacon transmission period of another network as the beacon transmission period, and

wherein when said beacon transmission instruction unit receives a beacon detection notification from its network at the new time slot through said beacon reception unit, the beacon transmission instruction unit switches the beacon transmission timing to the new time slot.

20. The radio communication device according to claim 19, wherein the collision notification frame also includes lifetime information of the collision notification, and

wherein said frame constructing unit counts the lifetime every time it receives the beacon transmission instruction from said beacon transmission instruction unit and generates the collision notification frame until the expiration of the lifetime.

21. The radio communication device according to claim 20, wherein the collision notification frame also includes a device ID for identifying the radio communication device which

has transmitted the collision notification frame, and

wherein when said frame judgment unit receives a collision notification frame in whose device ID is the same, the frame judgment unit gives precedence to the frame whose lifetime is larger.

Explanation based on Article 19, paragraph 1

Claim 18 included words not described explicitly in the specification, and therefore the words "one requiring data transmission/reception or" has been deleted.